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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,732	03/01/2002	Takashi Kitaguchi	220147US2	8415

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ALEXANDRIA, VA 22314

EXAMINER

ABDULSELAM, ABBAS I

ART UNIT	PAPER NUMBER
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2674

DATE MAILED: 11/28/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/085,732

Applicant(s)

KITAGUCHI ET AL.

Examiner

Abbas I Abdulsalam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) ✓
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) ✓
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-16 and 23-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Platzker et al. (USPN 6388654) in view of Tamura (USPN 6084939).

Regarding claims 1, 23-24 and 31, Platzker teaches an image sensor (22) to capture images of a local writing surface (21) continuously into a computer (23). Platzker teaches a projector (24) projecting the computer generated computer display image onto the writing surface (21) interposed with the projected image. See col. 6, lines 35-45 and Fig. 2A. Platzker discloses a local storage device (26) in connection with the arrangement discussed above (Fig. 2A) and indicates that the steps including the projection mechanism are implemented using computer software, resident and operation in the computer device (23). See col. 5, lines 57-61, col. 6, lines 2-5 and Fig. 3. Platzker also teaches a plurality of image processing sites (A through E) interconnected by a communication infrastructure (11), which may be local area network (LAN), Internet or other types of communication channel. See col. 5, lines 17-35 and Fig. 1. However, Platzker does not teach, "a means of an image-pickup part comprising two-dimensionally disposed pixels". Tamura on the other hand teaches an image pickup means including a plurality of pixels arranged in a two-dimensional form. See col. 2, lines 9-21, col. 7, lines 7-21 and Fig. 1.

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Platzker's method of processing images to adapt Tamura's image pickup means. One would have been motivated in view of the suggestion that the image pickup means is equivalent to the desired image pickup part. The use of an image pickup means helps function an image processing apparatus as taught by Tamura.

Regarding claims 24 and 31, in addition to what has been discussed above, Tamura teaches a driver (62) driving the photodetector array (58) under the control of the image pickup controller (24) and reads out signals from each pixel. See col. 4, lines 52-55.

Regarding claim 2, Tamura teaches an image pick up system in which an X-ray image obtained by X-ray beam transmitted through the object is converted into a visible light image by an image multiplier such that the corresponding video image is displayed on a monitor at appropriate resolution. See col. 1, lines 12-25.

Regarding claim 3, as shown in Fig. 2A, Platzker teaches a projection surface and writing surface being one and the same. See Fig. 2A (21).

Regarding claims 4, 25 and 32, Platzker discloses that a combination resulting from local markings and projections of remote site's markings appear on the local projection surface. See col. 3, lines 18-33.

Regarding claims 5, 26 and 33, Platzker teaches as shown in Fig. 1 that each site A, B and C can operate in either receive mode, transmit mode or both simultaneously. See col. 5, lines 21-26.

Regarding claim 6, Platzker discloses a calibration process with respect to an image sensor (22) and a writing surface (21). See col. 8, lines 24-42.

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Regarding claim 7, Platzker teaches writing surfaces of sites A, B and C as shown in Fig. 1 as [21A] through [21C] as well as projection surface [21D] of site D and monitor [12] of sit E. See col. 6, lines 13-19 and Fig. 1.

Regarding claim 8, Platzker teaches the inputs and output of the image process including the changes in local markings and changes in projections with respect to a writing surface (21). See col. 10, lines 19-41.

Regarding claim 9, Platzker teaches a calibration algorithm that maybe implemented by projecting predetermined images that include features some which are light intensities. Platzker also teaches calculation of computational parameters with respect to the features, and further teaches technique of projected targets. It would have been obvious that the technique, the calibration of intensities and the calculation can be equivalently used to obtain the desired blocking of a light beam.

Regarding claims 10, 27-28 and 35-36, Platzker teaches the image sensor is optimally focused at each time. Platzker adds that the focusing of projections can be either performed manually to the user's satisfaction or it can be performed automatically. It would have been obvious that one can use the focusing which equivalently provides the desired "shifting of a photography area". See col. 7, lines 58-63. Platzker also teaches that production of composite images that can be created by merging any number of input images. See col. 10, lines 67 and col. 11, lines 1-3.

Regarding claim 11, Platzker teaches that a pixel that is part of the writing in one or more input images will be assigned a non-background color, and elaborates a merging algorithm that applies to a relatively small number of pixels. See col. 11, lines 8-23.

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Regarding claims 12, 15-16, 29-30, 34 and 37, Platzker teaches a computer processing the viewed image signals or “frames” representing the images appearing in the viewing field of the local image sensor indicative the markings made on the writing surface. Platzker also teaches changes are detected between successive frames that would lead to compressed representation of changes. See col. 4, lines 24-43.

Regarding claim 13, Tamura teaches moving image photographing instruction of the photographer. See Fig. 7A. Tamura also teaches image construction through combination of the previous contents in the memories Ma1 to Ma4. See col. 12, lines 64-66.

Regarding claim 14, Tamura teaches a display controller for controlling a monitor (30) and the displaying of various characters and images (34). See col. 3, lines 50-63.

2. Claims 17-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Platzker in view of Tamura and in further view of Dreyer et al. (USPN 5504544).

Regarding claims 17-18, Platzker as modified has been discussed above. However, Platzker does not teach a lighting part illuminating the writing surface from a side as well as opposite to a side on which the photography part is provided. Dreyer on the other hand teaches that light is directed in to illuminate one of the two sides of linear prisms before directing toward an optical window as a collimated beam.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Pulitzer’s method of displaying images to adapt Dreyer’s illumination technique. One would have been motivated in view of the suggestion in Dreyer that

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the illumination technique equivalently provides the desired illumination of the writing surface.

The use of illumination with respect to linear prisms helps function a liquid crystal display device with reduced panels as taught by Dreyer.

Regarding claims 19-20, Dreyer teaches a projection system with multiple lamps and illustrates symmetric Pyrex condenser (29), which forms an elliptical shaped beam (Fig. 8). See the abstract

Regarding claims 21-22, Dreyer discloses the integration of light from multiple sources such that high chromatic dispersion of the refracting elements is taken into account. See col. 1, lines 66-70 and col. 2, lines 1-2.

Conclusion

3. The prior art made of record and not relied upon is considered to applicant's disclosure. The following arts are cited for further reference.

U.S. Pat. No. 6,141,107 to Nishi et al.

U.S. Pat. No. 6,118,516 to Irie et al.

4. Any inquiry concerning this communication or earlier communication from the examiner should be directed to **Abbas Abduselam** whose telephone number is **(703) 305-8591**. The examiner can normally be reached on Monday through Friday (9:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard Hjerpe**, can be reached at **(703) 305-4709**.

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Any response to this action should be mailed to:

Commissioner of patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314

Hand delivered responses should be brought to Crystal Park II, Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology center 2600 customer Service office whose telephone number is (703) 306-0377.

Abbas Abdulsalam

Examiner

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November 21, 2003



RICHARD KJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600